# Services Delivered:

This activity provides for the planning, engineering and construction of sewer lines, pumping stations, and treatment facilities for the Wastewater Program. The Public Works Engineering Technician is shown here, but actual expenditures are spread across Wastewater, Water, and Transportation projects.

This portion of the Wastewater system receives financing from System Development Charge revenues and transfers from Wastewater operations. The Wastewater system includes the treatment plant, five pump stations, and the collection system. Major repairs and improvements are financed through this capital budget.

This budget sets aside funds to provide for the major rehabilitation of the treatment plant, pump stations and replacement of deteriorated sewer piping within the collection system.

#### Personnel:

	BUDGET	BUDGET	BUDGET	REVISED	ADOPTED	PROJECTED
	FY'13	FY'14	FY'15	FY'15	FY'16	FY'17
Engineering Technician	1.00	1.00	1.00	1.00	1.00	1.00

#### FY'16 Anticipated Accomplishments & Corresponding Council Goal - Strategic Plan Item:

#### Maintain, Operate, and Expand our Infrastructure to Meet Community Needs

# Objective 1: Plan and develop infrastructure

**Action 2:** Complete Sewer Master Plan.

• Work on the Sewer Collection System Master plan has been initiated and should be completed in FY'16.

#### Objective 3: Ensure sewer infrastructure needs are met

**Action 1:** Upgrade sewer lines.

• Upgrade sewer lines in the core of the community per the Sewer Collection Master Plan.

**Action 2:** Evaluate Wastewater Treatment Plant expansion.

• Initiate plant expansion per the Wastewater Treatment Facility Plan Update following the completion of the Strategic Plan.

**Action 3:** Design and construct the necessary Webster Wastewater Pump Station No. 1 improvement project.

• Design and construction will proceed following completion of the feasibility planning effort.

**Action 4:** Initiate upgrades to the Water Restoration Plant SCADA hardware and software.

• Upgrades to the SCADA system will be made following the system analysis.

## Budget Highlights:

The project listing shows resources across the columns. Columns show the "Actual resources through FY'14"; the re-assessed resource needs of projects using current data for the "Revised FY'15" column, guiding our "Adopted FY'16" and resources estimated "Through FY'16". We have "Future Years" and "Total Project" columns for each project.

The individual project pages describe the project, the need, future and ongoing costs, and the total project cost. The tables show when and where the money is budgeted to come from and the expenses incurred and budgeted to incur through completion.

#### FY'15 Activity Review:

- Structural sewer lines were replaced in the core of the City.
- Completed work on the Wastewater Treatment Plant Facility Plan Update.
- Continued work on the Collection System Master Plan in anticipation of the UGB expansion being approved.
- Began feasibility analysis to rehab/replace Webster Pump Station.
- Began SCADA system evaluation.
- Began construction of new UV disinfection system.

# ${\bf Program:}\ \ {\bf Utilities/Wastewater-Capital\ Construction}$

# ACTIVE CAPITAL PROJECT RESOURCES

		Actual Through FY'14	Revised FY'15	Adopted FY'16	Total Through FY'16	Future Years	Total Project
SE0000	Miscellaneous Projects - SDC Fund 722	265,264	0	0	265,264	(3,284,736)	(3,234,736)
SE0000	Miscellaneous Projects - AFD Fund 725	83,843	0	0	83,843	83,843	83,843
SE0000	Miscellaneous Projects - General Fund 728	2,303,220	(1,046,880)	(41,000)	1,215,340	(1,599,660)	(1,626,660)
SE4964	WRP Phase 2 Expansion	1,535,000	1,900,000	1,300,000	4,735,000	10,625,000	12,025,000
SE5080	WRP Structural Repairs	233,000	75,000	75,000	383,000	608,000	683,000
SE5081	Collection System Master Plan Update	275,000	0	30,000	305,000	305,000	305,000
SE6012	Western Avenue Sewer Replacement	10,000	0	0	10,000	2,060,000	2,060,000
SE6064	Sewer Main Structural Repairs	1,265,000	550,000	555,000	2,370,000	3,140,000	3,700,000
SE6111	Mill Street Sewer Reconstruction	125,000	0	0	125,000	4,340,000	4,340,000
SE6112	Sewer Rate Study SE & RS	70,000	0	0	70,000	70,000	70,000
SE6156	Sewer Mains Related to Overlays	50,000	0	0	50,000	1,900,000	1,900,000
SE6198	Collection System Maintenance-Repair	125,000	100,000	75,000	300,000	525,000	600,000
SE6199	Pump-Lift Station Equipment Improvement	75,000	10,000	10,000	95,000	125,000	135,000
SE6200	Spaulding Indust. Park WW Infrastructure	100,000	0	0	100,000	100,000	100,000
SE6237	General Engineering Services	0	40,000	20,000	60,000	120,000	140,000
SE6238	Effluent Mixing Zone Dye Tracer Study	0	50,000	0	50,000	50,000	50,000
SE6239	WRP Equipment Improvement	0	50,000	50,000	100,000	250,000	300,000
SE6240	Webster PS No. 1 Rehab	0	750,000	0	750,000	750,000	750,000
SE6241	WRP SCADA System Evaluation	0	50,000	0	50,000	50,000	50,000
	Total Projects	<u>6,515,327</u>	<u>2,528,120</u>	<u>2,074,000</u>	<u>11,117,447</u>	<u>20,217,447</u>	22,430,447
	CLOSED OR CANCEL	LED CAPI	TAL PROJI	ECT RES	<u>OURCES</u>		
SE4963	Update WRP Facility Plan	330,000	(28,492)	0	301,508	301,508	301,508
	<b>Total Closed Projects</b>	<u>330,000</u>	(28,492)	0	301,508	301,508	301,508
	Grand Total - All Projects	<u>6,845,32</u>	<u>2,499,628</u>	<b>2,074,000</b>	11,418,955	20,518,955	22,731,955

# ${\bf Program:}\ \ {\bf Utilities/Wastewater-Capital\ Construction}$

# ACTIVE CAPITAL PROJECT SUMMARIES FOR FY'16

		Adopted FY'16 Beginning Fund Balance	Adopted FY'16 Revenue	Adopted FY'16 Capital Outlay	Adopted FY'16 Transfers	Adopted FY'16 Appropriated Fund Balance
SE0000	Miscellaneous Projects - SDC Fund 722	265,264	0	0	0	265,264
SE0000	Miscellaneous Projects - AFD Fund 725	2,903	0	0	0	2,903
SE0000	Miscellaneous Projects - General Fund 728	292,426	(41,000)	0	0	251,426
SE4964	WRP Phase 2 Expansion	2,169,782	1,300,000	3,469,782	0	0
SE5080	WRP Structural Repairs	84,610	75,000	159,610	0	0
SE5081	Collection System Master Plan Update	8,672	30,000	38,672	0	0
SE6012	Western Avenue Sewer Replacement	5,000	0	5,000	0	0
SE6064	Sewer Main Structural Repairs	83,370	555,000	638,370	0	0
SE6111	Mill Street Sewer Reconstruction	100,000	0	100,000	0	0
SE6112	Sewer Rate Study SE & RS	35,000	0	35,000	0	0
SE6156	Sewer Mains Related to Overlays	0	0	0	0	0
SE6198	Collection System Maintenance-Repair	152,869	75,000	227,869	0	0
SE6199	Pump-Lift Station Equipment Improvement	40,000	10,000	50,000	0	0
SE6200	Spaulding Indust. Park WW Infrastructure	50,000	0	50,000	0	0
SE6237	General Engineering Services	10,000	20,000	30,000	0	0
SE6238	Effluent Mixing Zone Dye Tracer Study	50,000	0	50,000	0	0
SE6239	WRP Equipment Improvement	0	50,000	50,000	0	0
SE6240	Webster PS No. 1 Rehab	675,000	0	675,000	0	0
SE6241	WRP SCADA System Evaluation	0	0	0	0	0
	<b>Total Projects</b>	<u>4,024,896</u>	<u>2,074,000</u>	<u>5,579,303</u>	0	<u>519,593</u>

# **Financial Summary**

	ACTUAL FY'13 \$	ACTUAL FY'14 \$	BUDGET FY'15 \$	REVISED FY'15 \$	ADOPTED FY'16 \$	PROJECTED FY'17 \$
Beginning Fund Balance	3,152,559	3,452,044	2,938,070	2,938,070	4,024,896	519,593
Resources						
Development Charges	254,974	289,987	150,000	150,000	200,000	200,000
Investment Interest	17,269	25,321	1,000	1,000	0	0
Advance Finance Interest	397	265	0	0	0	0
SDC Loans	7,559	8,171	0	0	0	0
General Fund	0	150,000	150,000	150,000	155,000	160,000
Sewer Fund	951,750	959,000	1,647,392	1,647,392	1,719,000	1,853,000
Equipment Replacement	0	0	550,000	550,000	0	0
RSSSD	5,000	0	0	0	0	0
Advance Financing	3,960	0	1,000	1,000	0	0
Total Current Revenues	<u>1,240,909</u>	<u>1,432,744</u>	<u>2,499,392</u>	<u>2,499,392</u>	<u>2,074,000</u>	<u>2,213,000</u>
<b>Total Resources</b>	<u>4,393,468</u>	<u>4,884,788</u>	<u>5,437,462</u>	<u>5,437,462</u>	<u>6,098,896</u>	<u>2,732,593</u>
Requirements						
Capital Outlay	941,424	717,958	5,230,547	5,230,547	5,579,303	2,190,000
Subtotal Expenditures	941,424	717,958	5,230,547	5,230,547	5,579,303	2,190,000
Appropriated Fund Balance	3,452,044	4,166,830	206,915	206,915	519,593	542,593
<b>Total Requirements</b>	<u>4,393,468</u>	<u>4,884,788</u>	<u>5,437,462</u>	<u>5,437,462</u>	<u>6,098,896</u>	<u>2,732,593</u>

Project	SE0000	<b>Fund 722</b>	Wastewater System Development Charges
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## **Project Description**

This project accounts for money collected during development in order to fund Wastewater projects.

# **Need for Project**

Since the establishment of the Wastewater System Development Charge (SDC), this fund has been used as the depository of these revenues, pending budgetary authorization for use of the funds.

**Estimated Total Project Cost:** These monies were allocated to specific projects during the Budget process.

#### **Resources**

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater SDC's	3,470,987	150,000	150,000	200,000	3,820,987	200,000	600,000	4,620,987
Wastewater SDC's to Projects	(3,842,963)	(150,000)	(150,000)	(200,000)	(4,192,963)	(150,000)	(4,150,000)	(8,492,963)
RSSSD SDC's	437,129				437,129			437,129
Investment/Loan Interest	200,111				200,111			200,111
					0			0
					0			0
<b>Total Resources</b>					265,264			(3,234,736)

Expenditures					0			0
Transfers					0			0
Ending Balance by Year	265,264	116,318	265,264	265,264	265,264	315,264	(3,234,736)	(3,234,736)
Total Requirements					265,264			(3,234,736)

Project	SE0000	Fund 725 Wastewater Advanced Financing	
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## **Project Description**

This project is used by our accounting function to account for all funds reimbursed to the wastewater utility from Advance Financed District (AFD) projects for which the utility was the project developer and revenue source.

#### **Need for Project**

The City Council has implemented a series of rate system structures to prepare for these projects, and this account is the method for accumulating all resources available to the system.

**Estimated Total Project Cost:** This project has no cost. It is an accounting entity for the purpose of accumulating resources.

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater AFD's	345,730	1,000	1,000		346,730		3,000	349,730
Wastewater AFD's to Projects	(286,082)	(1,000)	(1,000)		(287,082)		(3,000)	(290,082)
Investment Interest	24,195				24,195			24,195
<b>Total Resources</b>					83,843			83,843

Expenditures	80,940				80,940			80,940
Transfers/ Contingency					0			0
Ending Balance by Year	2,903	3,838	2,903	2,903	2,903	2,903	2,903	2,903
<b>Total Requirements</b>					83,843			83,843

Project	SE0000	Fund 728 Sewer Capital Projects – General	
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#### **Project Description**

This project description is used by our accounting function to account for all funds located in the Wastewater Capital Projects Funds that are not specifically appropriated to a project. All funds from System Development Charges and all surplus from wastewater operations are deposited in the capital projects fund. When appropriations are needed in the ensuing fiscal period, or if construction scopes are altered to respond to changed conditions, this project is the source for financing for the projects.

## **Need for Project**

The City Council has implemented a series of rate system structures to prepare for these projects, and this account is the method for accumulating all resources available to the system.

**Estimated Total Project Cost:** This project has no cost. It is an accounting entity for the purpose of accumulating resources.

#### **Schedule**

The cash financing accumulation for the wastewater expansion will be continued in this account, with interim financing for the next phase of construction augmenting cash flow to allow the single debt basis anticipated in the rate analysis.

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Operations Fund Transfers	10,393,284	1,647,392	1,647,392	1,719,000	13,759,676	1,853,000	4,000,000	19,612,676
Wastewater Capital & SDC's to Projects	(14,446,650)	(3,250,000)	(3,246,272)	(1,760,000)	(19,452,922)	(1,880,000)	(6,815,000)	(28,147,922)
Advance Finance	745,988	1,000	1,000		746,988			746,988
Investment Interest	2,229,244	1,000	1,000		2,230,244			2,230,244
Wastewater & RSSSD SDC's	2,521,188				2,521,188			2,521,188
Other/Fleet FY15	860,166	550,000	550,000		1,410,166			1,410,166
<b>Total Resources</b>					1,215,340			(1,626,660)

Expenditures	469,023				469,023			469,023
Transfers	494,891				494,891			494,891
Ending Balance by Year	1,339,306	86,759	292,426	251,426	251,426	224,426	(2,590,574)	(2,590,574)
Total Requirements					1,215,340			(1,626,660)

Project SE4964 WRP Phase 2 Expansion

#### **Project Description**

This project will expand aeration basin capacity, install reuse filtration, new secondary clarifier, thickener modifications, seismic upgrades, replacement UV equipment and miscellaneous piping, electrical and SCADA improvements.

#### **Need for Project**

The project will expand the capacity of the WRP and meet anticipated treatment requirements from ODEQ.



#### **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

## **Future and Ongoing Costs**

Design and construction. Design of the expansion/improvements cannot occur until the Facilities Plan Update (SE 4963) is complete. Facilities Plan Update will take approximately 12 to 18 months to complete, once started. Design of expansion/improvements will take approximately 18 to 24 months after completion of Facilities Plan. Construction of designed expansion/improvements will last approximately 18 to 36 months.

**Estimated Total Project Cost:** \$12,025,000 (Revised from \$9,970,000 to reflect ENR index of January 2013)

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	505,000	1,750,000	1,750,000	1,100,000	3,355,000	1,250,000	990,000	5,595,000
Wastewater SDC's	1,030,000	150,000	150,000	200,000	1,380,000	150,000	400,000	1,930,000
Loan					0		4,500,000	4,500,000
Total Resources					4,735,000			12,025,000

Expenditures	65,218	2,987,518	1,200,000	3,469,782	4,735,000	1,400,000	5,890,000	12,025,000
Transfers/ Contingency					0			0
Ending Balance by Year	1,469,782	0	2,169,782	0	0	0	0	0
Total Requirements					4,735,000			12,025,000

Project	SE5080	WRP Structural Repairs	
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## **Project Description**

This project will fund many minor repairs necessary for the proper operation and long term maintenance of the Water Restoration Plant. Included items are: roof repairs, exterior painting/restoration, stairways and landings. This project will also repair/install needed fall protection.

#### **Need for Project**

The project is needed for efficiency and for safety. It will create a fund for a large number of small capital projects to ensure the longevity of the Water Restoration Plant and its supporting structures. Two out buildings with flat roofs have wood rot and need to be re-roofed. We will convert the flat roofs to a slope roof with metal covers similar to other out buildings we have on site.

# **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

#### **Future and Ongoing Costs**

Evaluation and repair of both known and unknown deficiencies.

Estimated Total Project Cost: \$75,000/year as available

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	233,000	75,000	75,000	75,000	383,000	75,000	225,000	683,000
					0			0
					0			0
<b>Total Resources</b>					383,000			683,000

Expenditures	73,390	152,382	150,000	159,610	383,000	75,000	225,000	683,000
Transfers/ Contingency					0			0
Ending Balance by Year	159,610	0	84,610	0	0	0	0	0
<b>Total Requirements</b>					383,000			683,000

Project	SE5081	Collection System Master Plan Update	
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# **Project Description**

This project will update the Collection System Master Plan completed in 2004.

# **Need for Project**

The Master Plan Update will identify infrastructure requirements and sizing to serve the enlarged Urban Growth Boundary.

## **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 1: Plan and develop infrastructure.

# **Future and Ongoing Costs**

After preliminary discussions to update and calibrate flow model, it has been determined original project cost estimate was low.

New flow model will be developed and flow monitoring will be complete FY'12. Completion of the Master Plan will not occur until after the UGB enlargement process is complete.

**Estimated Project Cost:** \$275,000 (Revised from \$225,000 to reflect remaining RS share. Original Estimated Total Project Cost was \$100,000)

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	275,000			30,000	305,000			305,000
					0			0
					0			0
<b>Total Resources</b>					305,000			305,000

Expenditures	141,328	85,095	125,000	38,672	305,000			305,000
Transfers/ Contingency					0			0
Ending Balance by Year	133,672	0	8,672	0	0	0	0	0
<b>Total Requirements</b>					305,000			305,000

Project	SE6012	Western Avenue Sewer Replacement	
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# **Project Description**

This project will replace and upsize old deteriorated concrete sewer pipe in Western Avenue from G Street to the Water Restoration Plant. Approximately 4,700 lineal feet of 18" diameter sewer pipe will be installed.

#### **Need for Project**

The existing concrete pipe is severely deteriorated and is structurally failing. This pipeline serves the area west of Western Avenue from Upper River Road to the Rogue River. Increasing flows in the future are expected in the area due to growth. This pipeline also receives flow from the Bridge Street Pump Station. Currently the pipeline experiences surcharging during peak rainfall events. This project was ranked as the second priority for hydraulic capacity improvements in the 2004 Collection System Master Plan.

#### **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

#### **Future and Ongoing Costs**

Evaluation of both known and unknown deficiencies.

**Estimated Total Project Cost:** \$2,060,000 (Revised from \$1,800,000 to reflect ENR index of January 2013)

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects					0		1,000,000	1,000,000
Wastewater SDC's 86%	10,000				10,000		1,050,000	1,060,000
					0			0
Total Resources					10,000			2,060,000

Expenditures	121	4,879	4,879	5,000	10,000		2,050,000	2,060,000
Transfers/ Contingency					0			0
Ending Balance by Year	9,879	0	5,000	0	0	0	0	0
<b>Total Requirements</b>					10,000			2,060,000

Project	<b>SE6064</b>	Sewer Main Structural Repairs (Multiple Phases)	
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#### **Project Description**

This project will replace very old structurally deficient sewer pipe in 5th Street, the alleys fronting 5th Street between M and 'Streets and the alleys fronting Pine Street between Bridge and G Streets. The alleys identified for repair will be ranked as to severity and the project completed in multiple phases.

#### **Need for Project**

The majority of the sewer lines in the alleys are very old 6" pipe, have structural defects (cracks, holes and broken pipe) and extensive root encroachment which requires frequent and difficult cleaning and maintenance. This project combines the top two ranked priorities for structural repair in the 2004 Collection System Master Plan.

#### **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

#### **Future and Ongoing Costs**

Design and construction expected to continue as funding allows.

Estimated Total Project Cost: \$3,700,000

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	1,115,000	400,000	400,000	400,000	1,915,000	400,000	770,000	3,085,000
General Fund	150,000	150,000	150,000	155,000	455,000	160,000		615,000
					0			0
<b>Total Resources</b>					2,370,000			3,700,000

Expenditures	981,630	700,673	750,000	638,370	2,370,000	560,000	770,000	3,700,000
Transfers/ Contingency					0			0
Ending Balance by Year	283,370	0	83,370	0	0	0	0	0
<b>Total Requirements</b>					2,370,000			3,700,000

Project	SE6111	Mill Street Sewer Reconstruction	
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# **Project Description**

This project will replace approximately 9,500 linear feet of sewer main.

# **Need for Project**

Currently a large segment of the sewer main is near capacity and inaccessible for maintenance. The reconstruction will install new accessible main line, substantially reduce current inflow and infiltration problems and add capacity. The installation will effectively increase the capacity of the dual river siphons to beyond 2060. This project was identified in the Collection System Master Plan as a top priority.

#### **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

#### **Future and Ongoing Costs**

Evaluation of both known and unknown deficiencies.

**Estimated Total Project Cost:** \$4,340,000 (Revised from \$4,150,000 to reflect ENR index of January 2013)

#### Resources

	Actual Through FY'13	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects					0		1,515,000	1,515,000
Wastewater SDC's 70%	125,000				125,000		2,700,000	2,825,000
					0			0
<b>Total Resources</b>					125,000			4,340,000

Expenditures		100,000	25,000	100,000	125,000	0	4,215,000	4,340,000
Transfers/ Contingency					0			0
Ending Balance by Year	125,000	0	100,000	0	0	0	0	0
Total Requirements					125,000			4,340,000

Project	SE6112	Sewer Rate Study SE & RS	

## **Project Description**

This project will evaluate and recommend appropriate service area sewer rates after the master plans are updated.

## **Need for Project**

After the UGB is finalized, Wastewater Master Plans will be updated. The new capital improvement plan rates will need to be reviewed.

# **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

# **Future and Ongoing Costs**

Not applicable

**Estimated Total Project Cost:** \$70,000 (Revised from \$35,000 to reflect remaining RS share)

#### **Resources**

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	70,000				70,000			70,000
					0			0
					0			0
<b>Total Resources</b>					70,000			70,000

Expenditures		35,000	35,000	35,000	70,000			70,000
Transfers/ Contingency					0			0
Ending Balance by Year	70,000	0	35,000	0	0	0	0	0
Total Requirements					70,000			70,000

		verlays	E6156 Sewer Mains Re	Project
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## **Project Description**

This project will replace old structurally deficient sewer pipe in streets prior to scheduled overlay work.

#### **Need for Project**

The majority of the sewer lines are old, have structural defects (cracks, holes and broken pipe) and extensive root encroachment which requires frequent and difficult cleaning and maintenance. This project will assist completion of underground infrastructure work prior to scheduled street overlays.

## **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

# **Future and Ongoing Costs**

Design and construction of deficient mains.

Estimated Total Project Cost: \$1,900,000

#### **Resources**

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	50,000				50,000		1,850,000	1,900,000
Wastewater SDC's					0			0
					0			0
<b>Total Resources</b>					50,000			1,900,000

Expenditures	48,554		1,446		50,000		1,850,000	1,900,000
Transfers/ Contingency					0			0
Ending Balance by Year	1,446	0	0	0	0	0	0	0
<b>Total Requirements</b>					50,000			1,900,000

## **Project Description**

This project will replace badly deteriorated sewer mains or appurtenances, typically prior to paving due to street overlay, new development or alley repairs. In addition, this project will repair collection system deficiencies related to inflow and infiltration (I & I).

#### **Need for Project**

The maintenance is needed to repair severely structurally defective sewer mains or appurtenances, when encountered. Replacement prior to paving avoids the need to cut new or recently replaced paving due to sewer line failure. Recent storm events resulted in high flows from the Darneille Pump Station. The flows increased rapidly in correlation to the amount of rainfall indicating a large amount of I & I. This project will correct areas of excessive I & I identified with the recent flow monitoring information.

# **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

#### **Future and Ongoing Costs**

Evaluation and repair of unanticipated problems.

**Estimated Total Project Cost:** The target is \$75,000 per year when funds are available.

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	125,000	75,000	100,000	75,000	300,000	75,000	225,000	600,000
Wastewater SDC's					0			0
					0			0
<b>Total Resources</b>					300,000			600,000

Expenditures	22,131	100,000	50,000	227,869	300,000	75,000	225,000	600,000
Transfers/ Contingency					0			0
Ending Balance by Year	102,869	0	152,869	0	0	0	0	0
<b>Total Requirements</b>					300,000			600,000

Project	SE6199	Pump/Lift Station Equipment Improvement	
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## **Project Description**

This is the replacement or rebuild project for miscellaneous equipment such as pumps, motors and emergency generators located at the various pump and lift stations. One of the first items identified to be in need of replacement is the emergency generator and associated electrical transfer gear at the Redwood Pump Station.

## **Need for Project**

Each year pieces of equipment fail due to age and/or mechanical fault. This project will allow the funding to replace or overhaul equipment when needed.

# **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

## **Future and Ongoing Costs**

Replacement or repair of equipment as potential failure is identified.

# Estimated Total Project Cost: \$10,000/year as available

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	75,000	10,000	10,000	10,000	95,000	10,000	30,000	135,000
Wastewater SDC's					0			0
					0			0
Total Resources					95,000			135,000

Expenditures		50,000	45,000	50,000	95,000	10,000	30,000	135,000
Transfers/ Contingency					0			0
Ending Balance by Year	75,000	0	40,000	0	0	0	0	0
Total Requirements					95,000			135,000

Project SE6200	Spaulding Industrial Park Wastewater Infrastructure Study
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## **Project Description**

This project will evaluate and propose wastewater infrastructure for the Spalding Industrial Park. Potential wastewater infrastructure would include a basic collection system, a new pump station and associated force main. The initial evaluation will be to determine the extent of the service area (in addition to the Industrial Park) to serve the eastern end of the Urban Growth Boundary. The service area determination will be required to appropriately size the infrastructure.

# **Need for Project**

Additional development in the eastern end of the Urban Growth Boundary, both residential and industrial, will need to rely on a new pump station for sewer service.

#### **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

#### **Future and Ongoing Costs**

Once the infrastructure components are properly sized and located, an estimated project cost to install can be developed to reflect required construction costs.

**Estimated Total Project Cost:** \$100,000 (Revised from \$2,500,000 to reflect study/evaluation only)

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	100,000				100,000			100,000
Wastewater SDC's		·			0			0
					0			0
<b>Total Resources</b>					100,000			100,000

Expenditures		75,000	50,000	50,000	100,000			100,000
Transfers/ Contingency					0			0
Ending Balance by Year	100,000	0	50,000	0	0	0	0	0
<b>Total Requirements</b>					100,000			100,000

Project	SE6237	General Engineering Services	
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# **Project Description**

This project will fund the process to obtain a Wastewater Master Services Agreement for Professional Engineering and Permitting Services (MSA). With this MSA, a number of individual task orders will be assigned, negotiated and executed to undertake a variety of assignments on the City's wastewater facilities.

#### **Need for Project**

Given the nature of these individual assignments, it is desired for our MSA consultant to provide general engineering support and guidance for the overall wastewater program to develop the specific individual tasks.

# **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

## **Future and Ongoing Costs**

General support for Wastewater Fund (known and unknown).

Estimated Total Project Cost: \$20,000 per year as funds are available.

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects		40,000	40,000	20,000	60,000	20,000	60,000	140,000
Wastewater SDC's					0			0
					0			0
Total Resources					60,000			140,000

Expenditures		40,000	30,000	30,000	60,000	20,000	60,000	140,000
Transfers/ Contingency					0			0
Ending Balance by Year	0	0	10,000	0	0	0	0	0
Total Requirements					60,000			140,000

Project	SE6238	Effluent Mixing Zone Dye Tracer Study
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#### **Project Description:**

The Wastewater Treatment Plant has a permitted effluent mixing zone in the Rogue River. The allowable mixing zone is that portion of the Rogue River contained within a band extending out 50 feet from the north bank and extending from a point 10 feet upstream of the effluent outfall to a point 300 feet downstream from the outfall. Dye will be injected into the effluent and samples will be collected over time in the river to confirm and calibrate the mixing zone model. The model will be used to determine dilution ratios within the mixing zone and evaluate the reasonable potential to exceed receiving water quality criteria in the Rogue River.

# **Need for Project**

To meet NPDES permit renewal requirements.

# **Council Strategic Goal (2014/15 Goals)**

Preserve and Enjoy our Natural Resources.

Objective 4: Comply with all NPDES permit requirements.

#### **Future and Ongoing Costs**

May require upgrades to treatment processes.

Estimated Total Project Cost: \$50,000

#### **Resources**

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects		50,000	50,000		50,000			50,000
Wastewater SDC's					0			0
					0			0
<b>Total Resources</b>					50,000			50,000

Expenditures		50,000	0	50,000	50,000			50,000
Transfers/ Contingency					0			0
Ending Balance by Year	0	0	50,000	0	0	0	0	0
Total Requirements					50,000			50,000

Project	SE6239	WRP Equipment Improvement	
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## **Project Description**

This is the replacement fund for miscellaneous equipment such as gas blender, aeration basin mixers, various pumps, compressors and motors.

#### **Need for Project**

Each year pieces of equipment fail due to age and/or mechanical failure. This project will allow the funding of replacement equipment as needed.

# **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

## **Future and Ongoing Costs**

Evaluation and repair of unanticipated problems.

# Estimated Total Project Cost: \$50,000 per year as funds are available.

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects		50,000	50,000	50,000	100,000	50,000	150,000	300,000
Wastewater SDC's					0			0
					0			0
Total Resources				-	100,000			300,000

Expenditures		50,000	50,000	50,000	100,000	50,000	150,000	300,000
Transfers/ Contingency					0			0
Ending Balance by Year	0	0	0	0	0	0	0	0
Total Requirements					100,000			300,000

## **Project Description**

This project will evaluate whether to replace or rehabilitate Webster Pump Station No. 1. The improvements will be designed to meet current industry standards. During the predesign effort, a determination will be made whether to construct a new pump station above ground or to rehabilitate the existing. This pump station is currently located below ground, within the Webster Road right of way at the Reinhart Volunteer Park.

# **Need for Project**

Webster Pump Station No. 1 is currently capacity deficient. The pump station is approaching 50 years old and does not meet current service standards. The new pump station will be built to meet current industry standards.

#### **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

#### **Future and Ongoing Costs**

Routine and periodic maintenance.

Estimated Total Project Cost: \$750,000

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects		750,000	750,000		750,000			750,000
Wastewater SDC's					0			0
					0			0
<b>Total Resources</b>					750,000			750,000

Expenditures		750,000	75,000	675,000	750,000			750,000
Transfers/ Contingency					0			0
Ending Balance by Year	0	0	675,000	0	0	0	0	0
<b>Total Requirements</b>					750,000			750,000

#### **Project Description**

This project will evaluate the existing SCADA system hardware and software. The intent of the evaluation will be to determine to what extent existing PLC's can be migrated to a new software systems. New system hardware and software requirements will be identified.

#### **Need for Project**

The current SCADA system uses a Windows XP operating System. Microsoft will no longer be supporting Windows XP operating systems with security and technical support. Communications from some of the old PLC's may not work with the new Windows software. The SCADA system monitors various processes and equipment. Operations and Maintenance staff use the SCADA system to monitor and control various processes and equipment throughout the plant as well as collecting data for NPDES permit reporting purposes.

#### **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 3: Ensure sewer infrastructure needs are met.

## **Future and Ongoing Costs**

After evaluation, a system upgrade/replacement will be initiated.

Estimated Total Project Cost: \$50,000

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects		50,000	50,000		50,000			50,000
Wastewater SDC's					0			0
					0			0
<b>Total Resources</b>					50,000			50,000

Expenditures		50,000	50,000		50,000			50,000
Transfers/ Contingency					0			0
Ending Balance by Year	0	0	0	0	0	0	0	0
Total Requirements					50,000			50,000

# Project SE4963 Update WRP Facility Plan

#### **Project Description**

This project will update the facility plan.

#### **Need for Project**

ODEQ has suggested updating the facilities plan approximately every 5 years. The update will verify design basis for the planned phase 2 expansion. Most funding options for the planned expansion will require a current facilities plan. Methane gas generation will be evaluated with the new plan.



# **Council Strategic Goal**

Maintain, Operate and Expand our Infrastructure to Meet Community Needs Objective 1: Plan and develop infrastructure.

# **Future and Ongoing Costs**

Unknown at this time.

A seismic/structural evaluation component was added to the original intent of work. This increased the estimated project cost.

#### PROJECT COMPLETE

**Estimated Total Project Cost:** \$330,000 (Revised from original \$250,000 estimate)

#### Resources

	Actual Through FY'14	FY'15 Adopted	FY'15 Revised	FY'16 Adopted	Through FY'16	FY'17 Projected	Future	Total Project
Wastewater Capital Projects	330,000		(28,492)		301,508			301,508
					0			0
					0			0
Total Resources					301,508			301,508

Expenditures	301,508				301,508			301,508
Transfers/ Contingency					0			0
Ending Balance by Year	28,492	0	0	0	0	0	0	0
Total Requirements					301,508			301,508

# WHERE THE ROGUE RIVER RUN



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